## U.S. DEPARTMENT OF COMMERCE National Bureau of Standards Washington, D.C. 20234

January 25, 1971

Professor Joshua Lederberg Department of Genetics Stanford University School of Medicine Palo Alto, California 94304

Dear Professor Lederberg:

Recently I have noted in your newspaper articles reference to Thomas Schelling's concept of life values. I also note that you expect to contribute a paper to the forthcoming conference on risk-benefit sponsored by the National Academy of Engineering. Professor Lester B. Lave of Carnegie-Mellon University will also be there presenting a case study on automotive safety devices. If you are not familiar with his work I believe you would be interested in learning that Lave calculates (from the price and the improvement in risk due to the device) those values one would need place upon his person to be motivated to buy the various safety devices in question. These were seat belts, padded instrument panel, dual brakes, and the energy absorbing steering column. Life values ranged from a few x  $10^4$  to a few x  $10^6$  \$.

The values cited are not indicative of an actual statistical value distribution, dp/dV, which the public might in fact exhibit. I point this out to you though because I believe this concept is emergent and useful to economic analysis. With it a rational floor can be placed on safety. One can calculate, for example, the relation between various product demand schedules having different risk levels embodied in the same product. This then provides the means for analyzing the proper trade off between risk and benefits.

If you are interested in this approach I could send you more details. In any event I would appreciate learning from you:

- 1. Whether you regard that this self value distribution is real and valid as a measure for risk propensity, and
- 2. Whether you believe it urgent to initiate social research to measure such a function.

Carl O. Muchlhauxe\_

Sincerely,

CARL O. MUEHLHAUSE